## Message

From: Bangma, Jacqueline [Bangma.Jacqueline@epa.gov]

**Sent**: 1/15/2021 3:50:53 PM

To: Hill, Donna [Hill.Donna@epa.gov]; Strynar, Mark [Strynar.Mark@epa.gov]

CC: Lang, Johnsie [Johnsie.Lang@arcadis.com]

Subject: RE: Ditch notes

Thanks for checking Donna,

After you and I talked yesterday, I was asked to quarantine with a few others in the lab. Ex. 6 Personal Privacy (PP)

Ex. 6 Personal Privacy (PP)

Ex. 6 Personal Privacy (PP) wanted to let you know since this will delay the time frame for the ditch study a bit more.

I hope you have a relaxing holiday weekend.

-Jackie

From: Hill, Donna <Hill.Donna@epa.gov> Sent: Thursday, January 14, 2021 5:05 PM

To: Bangma, Jacqueline <Bangma.Jacqueline@epa.gov>; Strynar, Mark <Strynar.Mark@epa.gov>

Cc: Lang, Johnsie < Johnsie. Lang@arcadis.com>

Subject: RE: Ditch notes

Jackie,

I checked through the freezers again and cannot find those samples: 600-2 and 673-2.

Donna

From: Bangma, Jacqueline < Bangma, Jacqueline@epa.gov>

Sent: Thursday, January 14, 2021 10:53 AM

To: Hill, Donna < Hill. Donna@epa.gov >; Strynar, Mark < Strynar. Mark@epa.gov >

Cc: Lang, Johnsie < Johnsie. Lang@arcadis.com >

Subject: RE: Ditch notes

Donna,

I went a head and did an inventory of the box before I head out today, and we are missing livers 373-2 and 600-2 (These were missing in the recent inventory you sent me as well). Perhaps they were moved to another box at some point? Or do we know if they were exhausted in an earlier analysis?

-Jackie

From: Hill, Donna < <a href="mailto:Hill.Donna@epa.gov">Hill.Donna@epa.gov</a> Sent: Wednesday, January 13, 2021 11:43 AM

To: Strynar, Mark < <a href="mailto:Strynar.Mark@epa.gov">Strynar, Mark <a href="mailto:Strynar.Mark@epa.gov">Strynar.Mark@epa.gov</a>>

Cc: Lang, Johnsie < Johnsie. Lang@arcadis.com >

Subject: RE: Ditch notes

OK- I'll be down to your lab at 10am. I'll probably come into the lab outside of James office.

From: Strynar, Mark <<u>Strynar.Mark@epa.gov</u>> Sent: Wednesday, January 13, 2021 10:22 AM

To: Bangma, Jacqueline < Bangma. Jacqueline@epa.gov>; Hill, Donna < Hill. Donna@epa.gov>

Cc: Lang, Johnsie < Johnsie. Lang@arcadis.com >

Subject: RE: Ditch notes

10-11 works for me tomorrow but I have a hard stop at 11 am for a branch meeting.

Mark

From: Bangma, Jacqueline <Bangma.Jacqueline@epa.gov>

Sent: Wednesday, January 13, 2021 10:02 AM

To: Hill, Donna < Hill. Donna@epa.gov >; Strynar, Mark < Strynar. Mark@epa.gov >

Cc: Lang, Johnsie < Johnsie. Lang@arcadis.com>

Subject: RE: Ditch notes

Donna,

I apologize, I forgot Ex. 6 Personal Privacy (PP) tomorrow at 1:45pm. Would the morning between 10-11 still work for you tomorrow? I am so sorry for the back to back emails.

From: Hill, Donna < Hill. Donna@epa.gov > Sent: Wednesday, January 13, 2021 9:35 AM

To: Strynar, Mark <Strynar.Mark@epa.gov>; Bangma, Jacqueline <Bangma.Jacqueline@epa.gov>

Cc: Lang, Johnsie < Johnsie. Lang@arcadis.com >

**Subject:** RE: Ditch notes

Why don't I bring the samples down around 2pm? My branch meeting starts at 1 and rarely lasts longer than 30 minutes. I can email when I'm on my way.

From: Strynar, Mark < <a href="mailto:Strynar.Mark@epa.gov">Sent: Wednesday</a>, January 13, 2021 9:06 AM

To: Hill, Donna <Hill.Donna@epa.gov>; Bangma, Jacqueline <Bangma.Jacqueline@epa.gov>

Cc: Lang, Johnsie < Johnsie. Lang@arcadis.com>

Subject: RE: Ditch notes

I am free anytime for the rest of the day until 4:30 PM.

Mark

From: Hill, Donna < Hill. Donna@epa.gov > Sent: Tuesday, January 12, 2021 4:30 PM

To: Bangma, Jacqueline <Bangma, Jacqueline@epa.gov>; Strynar, Mark <Strynar, Mark@epa.gov>

Cc: Lang, Johnsie < Johnsie. Lang@arcadis.com>

Subject: RE: Ditch notes

Yes- I'm free 10-11am and after 2pm.

Donna

From: Bangma, Jacqueline <Bangma.Jacqueline@epa.gov>

Sent: Tuesday, January 12, 2021 3:49 PM

To: Hill, Donna < Hill. Donna@epa.gov >; Strynar, Mark < Strynar. Mark@epa.gov >

Cc: Lang, Johnsie < Johnsie. Lang@arcadis.com >

Subject: RE: Ditch notes

Thanks Donna ① Looks like the number for block one also match up with the prelim results in an excel file Johnsie shared, so I am guessing you are correct.

Would you like to meet briefly Thursday for me to pick up the livers?

-Jackie

From: Hill, Donna < Hill. Donna@epa.gov> Sent: Tuesday, January 12, 2021 2:40 PM

To: Bangma, Jacqueline < Bangma. Jacqueline@epa.gov >; Strynar, Mark < Strynar. Mark@epa.gov >

Cc: Lang, Johnsie < Johnsie. Lang@arcadis.com >

Subject: RE: Ditch notes

Hi Jackie- I checked the notebook again. I know if Johnsie was removing part of the tissue to homogenize, she would write down the weight. Since she didn't write down weights, I believe she homogenized the whole liver. The liver weights are below:

Animal		Tmt	Liver
ID	5ex	Group	Wt(g)
727-3	F	PEAS	1.18
724-3	F	CON	1.28
673-2	M	CON	1.49
673-3	M	PFAS	1.41
609-1	F	PFAS	1.01
600-2	M	PFAS	1.46
			Liver
Animal		Tmt	Wt(g)
ID	l _	C	e in a sam
EL.	5ex	Group	5/31/18
803-2	Sex M	CON	1.2
****		'	
803-2	M	CON	1.2
803-2 803-3	M	CON CON	1.2 1.29
803-2 803-3 806-1	M M F	CON CON	1.2 1.29 0.93
803-2 803-3 806-1 806-2	M M F	CON CON CON	1.2 1.29 0.93 1.04
803-2 803-3 806-1 806-2 800-2	M N F F	CON CON CON CON	1.2 1.29 0.93 1.04 1.29 1.17
803-2 803-3 806-1 806-2 800-2 800-3	N N F F N	CON CON CON CON MIX	1.2 1.29 0.93 1.04 1.29 1.17

MIX

0.9

Donna

807-2

From: Bangma, Jacqueline <Bangma\_Jacqueline@epa.gov>

Sent: Monday, January 11, 2021 12:32 PM

To: Hill, Donna < Hill. Donna@epa.gov >; Strynar, Mark < Strynar. Mark@epa.gov >

Cc: Lang, Johnsie < Johnsie. Lang@arcadis.com >

Subject: RE: Ditch notes

Donna,

Yes, you are correct, the weights used in the homogenization for livers from round 2.  $\odot$ 

-Jackie

From: Hill, Donna < Hill. Donna@epa.gov>
Sent: Monday, January 11, 2021 11:59 AM

To: Bangma, Jacqueline <Bangma, Jacqueline@epa.gov>; Strynar, Mark <Strynar, Mark@epa.gov>

Cc: Lang, Johnsie < Johnsie. Lang@arcadis.com >

Subject: RE: Ditch notes

Jackie- that sounds great! I will be at RTP tomorrow and Thursday. I took Johnsie's notebook to my office so I'll double check, but I think I either rewrote or photographed all her notes pertaining to the ditch study. I'll double check on the liver weights. And to clarify, you need the weight of the actual sample homogenized, not the total liver weight?

Thanks again! Donna

From: Bangma, Jacqueline < Bangma, Jacqueline@epa.gov>

Sent: Monday, January 11, 2021 11:29 AM

To: Hill, Donna < Hill. Donna@epa.gov >; Strynar, Mark < Strynar. Mark@epa.gov >

Cc: Lang, Johnsie < Johnsie. Lang@arcadis.com >

**Subject:** RE: Ditch notes

Hi Donna and Johnsie,

Have sometime and wanted to start working on the ditch study measurements.

I did some more digging and located serum from both round 1 and 2 in the chest freezer behind Mark's office (6 serum samples for each round). Looks like there are max 25 uL serum per mouse for round 2 and at least that much serum or more from round 1. From the spreadsheet you sent me, all of the livers are also accounted for with the exception of 2 animals in round 1 (IDs 673-2 and 600-2).

From the excel spreadsheets and lab notes shared with me, it looks like block 1 livers had 4 mL of DI water added to the homogenate, and block 2 livers had 3 mL of DI water added to the homogenate. The one piece of info I do not have is the weight of liver tissues used for block 2 homogenization. Do either of you have that info somewhere by any chance?

Since there is considerably less serum available per mouse then liver homogenate, I am hoping to use both the preliminary data from Johnsie's runs as well as run a small aliquot of one or two a liver extracts to determine the cal range for each analyte (and check to see if I should add any additional PFAS to the quantitation list). Currently I have GenX, PFOA, PEPA, NBP2, PFO4DA, PFO5DoDA, 6:2FTS, PFMOAA, and PFHxA as the main PFAS of interest. I believe we now have standards for most of these (either synquest, chemours, or wellington).

Let me know if this sounds like a good game plan, if so, we can arrange a time for me to pick up the liver homogenates.

Hope everyone had a wonderful weekend!

## -Jackie

From: Hill, Donna < Hill. Donna@epa.gov > Sent: Friday, December 18, 2020 11:41 AM

To: Bangma, Jacqueline <Bangma.Jacqueline@epa.gov>; Strynar, Mark <Strynar.Mark@epa.gov>

Cc: Lang, Johnsie < Johnsie.Lang@arcadis.com>

Subject: FW: Ditch notes

From Ex. 6 Personal Privacy (PP)

Sent: Friday, December 18, 2020 11:37 AM

To: Hill, Donna < Hill, Donna@epa.gov>

Subject: Ditch notes

Sent from my Verizon LG Smartphone